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## PATENT ABSTRACTS OF JAPAN

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(21)Application number : 2002-219701 (71)Applicant : SHOWA ELECTRIC  
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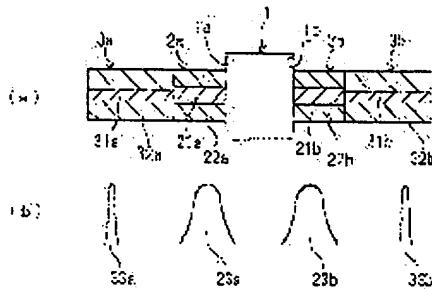
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## (54) OPTICAL FIBER PARTS

(57)Abstract:

PROBLEM TO BE SOLVED: To reduce connection loss by optical connection to an optical element in the single mode.



SOLUTION: The optical fiber parts are provided with an optical element 1, a pair of photonic crystal (PhC) fibers 2a and 2b having large mode field diameters, and a pair of single mode (SM) fibers 3a and 3b having small mode field diameters. The pair of PhC fibers 2a and 2b are provided with cores 21a and 21b for transmitting light and clads 22a and 22b provided on the outer circumference of cores 21a and 21b. The first PhC fiber 2a is optically connected to the light incidence end face 1a of the optical element 1, and the second PhC fiber 2b is optically connected to a light exit end face 1b. The first SM fiber 3a is optically connected to the input end of the first PhC fiber 2a, and the second SM fiber 3b is optically connected to the output end of the second PhC fiber.

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